

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015753**Date Inspected:** 12-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed apparent welding work in progress in Bay 10.

Bay 11

This QA Inspector randomly observed no apparent welding related work being performed in Bay 11.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joints CA063-005, 006 located on PCMK 9CE, edge plate to side plate holdback weld and edge plate to deck plate holdback weld, respectively, north (crossbeam) side. Welder was identified as 220063. QC was identified as ZPMC CWI An Qing Xiang (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was Zhang Xiao Ming (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2232-TC-U4b-F, WPS-B-T-2234-TC-U4b-F, respectively. Also at this location and appearing to be monitoring the welding operation were ABF Representatives Wang Zhong Yuan and Cao Hai Zhou.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

FCAW welding of weld joints SEG056A-028, 056 located on PCMK 9DE, edge plate to side plate holdback weld and edge plate to deck plate holdback weld, respectively, north (crossbeam) side. Welder was identified as 220063. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2232-TC-U4b-F, WPS-B-T-2234-TC-U4b-F, respectively. Also at this location and appearing to be monitoring the welding operation were ABF Representatives Wang Zhong Yuan and Cao Hai Zhou.

FCAW welding of weld joint CA064-002 located on PCMK 9CE, edge plate to deck plate holdback weld, south (bikepath) side. Welder was identified as 220067. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2234-TC-U4B-F. Also at this location and appearing to be monitoring the welding operation were ABF Representatives Wang Zhong Yuan and Cao Hai Zhou.

FCAW welding of weld joint CA066-006 located on PCMK 9DE, edge plate to deck plate holdback weld, south (bikepath) side. Welder was identified as 220067. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2234-TC-U4B-F. Also at this location and appearing to be monitoring the welding operation were ABF Representatives Wang Zhong Yuan and Cao Hai Zhou.

FCAW welding of weld joints EP164A-009, 010, 011, 012 located on PCMK 9CE/9DE, transverse joint, edge plate to stiffener holdback welds, south (bikepath) side. Welder was identified as 220067. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2132 and WPS-B-T-2134. Also at this location and appearing to be monitoring the welding operation were ABF Representatives Wang Zhong Yuan and Cao Hai Zhou.

Flame heat straightening on OBG segment 8CW, panel point 77, south (crossbeam) side, deck panel diaphragm and floor beam in the area of upper floor beam flange to deck panel diaphragm joint. ZPMC personnel presented to this QA Inspector, HSR1(B)-8722, dated 7/2/10. The performance of work randomly observed appeared to be in conformance with that document. At this location and appearing to be monitoring the heat straightening operation was ABF Representative Cao Hai Zhou. No ZPMC QC personnel were observed at this location. See photo below showing the areas marked as a result of the heat of the heat straightening operation.

Flame cutting using automated equipment on the deck plate and bottom plate of OBG segment 8CW at the 8BW/8CW transverse joint. See photos below of these operations.

Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

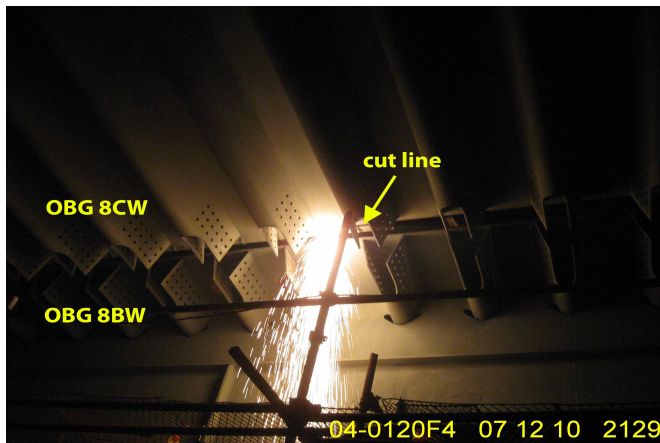
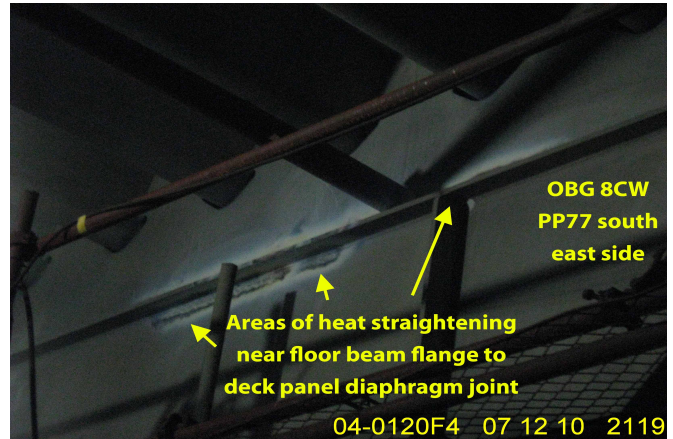
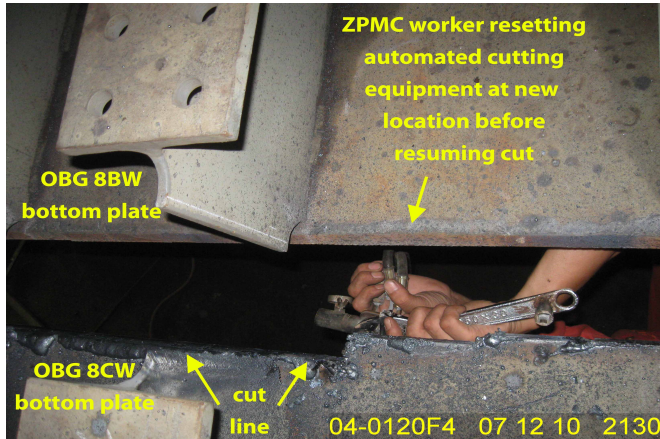
This QA Inspector observed no apparent work was being performed on the heavy dock. All 4 tower lifts 2 were erect with all 4 tower lifts 3 attached above, respectively. ABF Representative Li Ke Wei informed this QA Inspector that ZPMC personnel were drilling at strut plate connections on the lifts 3 at the 89M, 99M, and 109M levels. The lifts 2/3 worker access tower elevator was moving between those upper levels, but did not respond to being summoned by this QA Inspector pushing the call button at the bottom entrance. The digital display at the

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

call button appeared to show that the elevator was at level 8 as it moved to several different levels. This QA Inspector did not observe any ZPMC QC presence anywhere on the Heavy Dock. The intermittent warning light and horn appeared to stop operating when the elevator was observed rising above approximately 10 meters from the bottom access level.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Dawson, Paul

QA Reviewer
